ABSTRACT OF THE DISCLOSURE

5

10

A crystal growth apparatus for a semiconductor thin film includes a first radiator for selectively radiating first laser light to the semiconductor thin film for allowing semiconductor thin film to crystallize through a super-lateral growth method and a second radiator for selectively radiating second laser light, which is transmitted through the semiconductor thin film better than the first laser light, to the glass substrate at a position corresponding to an area including a crystallization target area of semiconductor thin film. The second radiator includes a laser oscillator for producing the second laser light, an aperture stop plate being radiated with the second laser light to form a desired aperture image, and an objective lens for forming the aperture image on the main surface of the glass substrate. Thus, a polycrystalline semiconductor thin film having large crystal grains can easily and stably be obtained.